

We Claim:

- 1 1. (Original) N-methylpyrrolidone solvate of cefprozil.
- 1 2. (Original) The solvate of claim 1 characterized by a crystalline structure containing
2 cefprozil and N-methyl pyrrolidone in a molar ratio of 1: 1.5.
- 1 3. (Original) The solvate of claim 1 characterized by X-ray diffraction pattern having
2 peaks at about 6.24, 6.48 and 18.64 degrees two-theta.
- 1 4. (Original) N,N-dimethylacetamide solvate of cefprozil.
- 1 5. (Original) The solvate of claim 4 characterized by a crystalline structure containing
2 cefprozil and N,N-dimethylacetamide in a molar ratio of 2: 1.5.
- 1 6. (Original) The solvate of claim 4 characterized by X-ray diffraction pattern having
2 peaks at about 6.48, 7.08, 8.46 and 18.78 degrees two-theta.
- 1 7. (Original) The solvate of claim 6 further characterized by peaks at about 18.32, 20.06,
2 21.64, 22.16 and 24.7 degrees two-theta.
- 1 8. (Original) A process for the preparation of N-methylpyrrolidone solvate of cefprozil,
2 the process comprising:
3 obtaining a solution of cefprozil in one or more solvents;
4 adding N-methylpyrrolidone to the solution of cefprozil at a pH of about 4.5 to about
5 6.5;
6 and isolating the N-methylpyrrolidone solvate of cefprozil.
- 1 9. (Original) A process for the preparation of N,N-dimethylacetamide solvate of
2 cefprozil, the process comprising:
3 obtaining a solution of cefprozil in one or more solvents;
4 adding N,N-dimethylacetamide to the solution of cefprozil at a pH of about 4.5 to
5 about 6.5;
6 and isolating the N,N-dimethylacetamide solvate of cefprozil.

- 1 10. (Original) The process of claim 8 or 9, wherein the solution is obtained by adding a
2 base to a suspension of cefprozil in the solvent.
- 1 11. (Original) The process of claim 10, wherein the base comprises one or more of alkali
2 metal salts of carboxylic acids, organic amines, ammonium hydroxide, alkali metal
3 hydroxides, alkali metal carbonates, or alkali metal bicarbonates.
- 1 12. (Original) The process of claim 11, wherein the organic amine comprises one or more
2 of triethylamine, pyridine, picoline, ethanolamine, triethanolamine, and
3 dicyclohexylamine.
- 1 13. (Cancelled)
- 1 14. (Cancelled)
- 1 15. (Cancelled)
- 1 16. (Original) The process of claim 8 or 9, wherein the solution is obtained directly from
2 a reaction in which cefprozil is formed.
- 1 17. (Original) The process of claim 8 or 9, wherein the solvent comprises one or more of
2 acetonitrile, ketone, alcohol, cyclic ether, water, or mixtures thereof.
- 1 18. (Cancelled)
- 1 19. (Cancelled)
- 1 20. (Cancelled)
- 1 21. (Original) The process of claim 8 or 9, wherein isolating the solvate comprises one or
2 more of filtration, filtration under vacuum, decantation, and centrifugation.
- 1 22. (Cancelled)
- 1 23. (Original) A process for the preparation of crystalline cefprozil, the process
2 comprising:

3 stirring the N-methylpyrrolidone or N,N-dimethylacetamide solvate of cefprozil in a
4 solvent at a temperature of from about 20°C to about 60°C;
5 and isolating the crystalline cefprozil.

1 24. (Cancelled)

1 25. (Original) The process of claim 23, wherein the solvent comprises one or more of
2 acetonitrile, ketone, alcohol, cyclic ether, water, or mixtures thereof.

1 26. (Cancelled)

1 27. (Cancelled)

1 28. (Cancelled)

1 29. (Original) The process of claim 23, wherein isolating the crystalline cefprozil
2 comprises one or more of filtration, filtration under vacuum, decantation, and
3 centrifugation.

1 30. (Original) The process of claim 23, wherein the crystalline cefprozil may be obtained
2 as a monohydrate or a hemihydrate of cefprozil.

1 31. (Cancelled)

1 32. The process of claim 23, further comprising forming the product obtained into a
2 finished dosage form.